

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of treating mucositis in a patient, comprising administering to the patient a topical formulation of a pharmaceutical composition comprising a pharmaceutically effective amount of IL-11.

Claim 2 (cancelled).

Claim 3 (previously amended): The method of claim 1, wherein the mucositis is oral mucositis.

Claim 4 (previously amended): The method of claim 1, wherein the mucositis is gastrointestinal mucositis.

Claims 5-10 (cancelled).

Claim 11 (original): The method of claim 1 wherein the pharmaceutically effective amount of IL-11 is between about 1 and about 250 $\mu\text{g/kg}$ body weight.

Claim 12 (original): The method of claim 1, wherein the pharmaceutical composition comprises a solution containing IL-11 and a suitable liquid carrier.

Claim 13 (original): The method of claim 12, wherein the suitable liquid carrier is selected from the group consisting of water, organic solvents, oils and fats.

Claim 14 (original): The method of claim 12, wherein the suitable liquid carrier is sodium bicarbonate.

Claim 15 (original): The method of claim 12, wherein the suitable liquid carrier is an infant formula.

Claim 16 (original): The method of claim 1, wherein the pharmaceutical composition comprises an immediate release carrier for immediate release of IL-11 into the oral cavity.

Claim 17 (original): The method of claim 16, wherein the immediate release carrier is selected from the group consisting of sugars, glycine, lactose, dextrin, starch, gelatin, cellulose, methyl cellulose, hydroxypropylmethyl cellulose, and sodium carboxymethyl cellulose.

Claim 18 (original): The method of claim 16, wherein the topical formulation is selected from the group consisting of an oral gel, tablet or suspension.

Claim 19 (original): The method of claim 1, wherein the pharmaceutical composition comprises an immediate release carrier for delivery of IL-11 to the gastrointestinal tract.

Claim 20 (original): The method of claim 19, wherein the immediate release carrier is selected from the group consisting of sugars, glycine, lactose, dextrin, starch, gelatin, cellulose, methyl cellulose, hydroxypropylmethyl cellulose, and sodium carboxymethyl cellulose.

Claim 21 (original): The method of claim 19, wherein the topical formulation is a pill, tablet or capsule.

Claim 22 (original): The method of claim 1, wherein the pharmaceutical composition comprises a sustained-release carrier for delivery of IL-11 to the oral cavity.

Claim 23 (original): The method of claim 21, wherein the topical formulation is a patch, lozenge or an uncoated tablet.

Claim 24 (original): The method of claim 1, wherein the pharmaceutical composition comprises a sustained-release carrier for delivery of IL-11 to the gastrointestinal tract.

Claim 25 (original): The method of claim 24, wherein the topical formulation is a pill, tablet or capsule.

Claim 26 (original): The method of claim 1, wherein the pharmaceutical composition comprises an immediate release carrier for delivery of IL-11 for cervical administration.

Claim 27 (original): The method of claim 25, wherein the topical formulation is selected from the group consisting of a topical cream, solution, ointment and gel.

Claim 28 (original): The method of claim 1, wherein the pharmaceutical composition comprises a sustained-release carrier for delivery of IL-11 for cervical administration.

Claim 29 (original): The method of claim 26, wherein the topical formulation is a topical cream, solution, ointment or gel.

Claim 30 (original): The method of claim 1, wherein the pharmaceutical composition comprises an enema preparation of IL-11 and a suitable liquid carrier for delivery to the colon.

Claim 31 (original): The method of claim 1, wherein the pharmaceutical composition comprises a proteinase inhibitor.

Claim 32 (original): The method of claim 31, wherein the proteinase inhibitor is selected from the group consisting of aprotinin, α -macroglobulin, soybean trypsin inhibitor, and ovomucoid.

Claim 33 (original): The method of claim 31, wherein the proteinase inhibitor is aprotinin.

Claim 34 (original): The method of claim 1, wherein the topical formulation comprises an enteric coating.

Claim 35 (original): The method of claim 34, wherein the enteric coating is selected from the group consisting of a methacrylic acid-methacrylic acid ester-based copolymer, an anionic water-soluble polymer cellulose ether, cellulose acetate phthalate, polyvinyl acetate phthalate, and hydroxypropyl methylcellulose phthalate.

Claims 36-46 (cancelled).